CHAPTER 2: SECTOR CONTEXT: ENABLING THE IMPLEMENTATION OF SECTOR POLICIES AND PROGRAMS

Introduction

- 2.1. The first decade of freedom witnessed the development of a rich base of sector-wide policies, legal and financing frameworks, and institutional development. Curricula and pedagogy have been improved, as well as student and system evaluation mechanisms. A key feature of these policies, programs and legal instruments is their interdependence on effective implementation and desired impact. Like all other aspects of the system, the physical teaching and learning environment may facilitate or impede the implementation and desired impact of sector policies, programs and legal instruments. In this particular case, the current environment, if not urgently attended to, may often play an impeding rather than facilitating role.
- 2.2. This policy is expected to facilitate the implementation of existing policies, programs and legal instruments in two principal ways: Firstly, it addresses elements of the physical teaching and learning environment that constrain effective policy and program implementation. Secondly, its strategic direction may set new parameters for existing policies and programs. From this perspective, this policy may improve the realism and/or feasibility of existing policies, their currently set strategic targets and the scale and nature of programs. This may particularly be the case where the demands of existing policies on the teaching and learning environment cannot be met-cannot be met within a specified time frame, may not be met at the level of set targets, or are dissonant with non-negotiable tenets of this policy. This latter situation may induce or cause a revision and/or reconsideration of existing policies, programs and/or their strategic targets. The reverse, it should be noted, may also be the case.

Responding to the demands of existing sector policies and programs

- 2.3. One of the key rationales for this policy is to guide future provision of the environment and to ensure that it adequately responds to the demands of, amongst others, the following key policies, programs and legal instruments.
- 2.4. The Constitution: The constitution, specifically section 29 (1) of the Bill of Rights, states that everyone has the right to basic education, including adult basic education and to further education which the state, through reasonable measures, must make progressively available and accessible. The constitution provides for compulsory primary education. However, in real terms, the Bill of Rights obligates the government to take appropriate/reasonable measures to make secondary and further education progressively accessible to all. Section 9 (2, 3, 4, and 5) of the constitution further obligates the state to attain equality of opportunity and to be non-discriminatory.
- 2.5. The South Africa Schools Act: Section 3 of the 1996 South Africa Schools Act (SASA) provides for a compulsory general education phase for ages 7 to 15 or grade 1 to 9. Provincial

MECs are responsible for providing school places for every child of eligible age for the compulsory GET. Other than legal instruments, South Africa's skills shortage and the overall development imperative suggest that quality senior secondary education should be accessible to *all* eligible learners.

- 2.6. Student Admission Policy: The 1996 SASA also guarantees that "... no learner may be denied admission to an ordinary school on any grounds, including grounds of disability, learning difficulty or pregnancy".
 - 2.6.1. Implication for the teaching and learning environment: The above three legal instruments demand that education, training and skills development opportunities should be extended to all South African learners in an equitable and nondiscriminatory manner. The currently wide disparities in the provision of the physical teaching and learning environment violate the rights of citizens enshrined in these instruments in two principal ways: Firstly, by affecting physical access to education and training. This may be the case where schools are not within walking distance from learners and where there are no alternative means of access such as hostel accommodation or learner transportation. It may also be the case where learners with physical challenges do not have real access to facilities. Secondly, by affecting the quality of instruction learners are exposed to, thus leading to unequal opportunity. This may be the case where intolerable differentials in the environment—classrooms, special teaching rooms, laboratories, co-curricula facilities, libraries, books and instructional materials, equipment etc.—lead to substantial differences in learning outcomes. Equity in the provision of an enabling physical teaching and learning environment is therefore a constitutional right and not just a desirable state.
 - 2.6.2. From a political and social angle the conditions under which some learners are taught are simply unacceptable. It is reminiscent of the old regime and socially and politically intolerable.
- 2.7. Early Childhood Development and Pre-Primary Education: The government has adopted a pro-poor expansion of universal access to quality ECD. The DoE aims to reach universal access to 1.7 learner years of quality ECD to 5-year olds by 2011. In real terms this means an expansion of substantive access (not just nominal access) from about 200,000 children at present, to the full 900,000 children of eligible age.
- 2.8. Meeting the demands and targets of this policy has enormous implications for the provision of infrastructure and/or efficient use of existing infrastructure. There are also significant implications for the provision of furniture, equipment, books and instructional materials.
- 2.9. Inclusive education: White Paper No. 6: Special Needs Education, Building an Inclusive Education and Training System underpins the development of an inclusive education and training system. Guidelines for the implementation of this policy have also been articulated. The 2008/2012 sector strategic plan targets that by 2012, 400 special schools would have been reviewed, rationalized and upgraded to offer quality education and support as resource centers that provide professional support to ordinary schools. These centers will also provide support to an estimated 280, 000 out-of- school youth with disabilities. In addition, 80 percent of all schools will be adequately resourced to provide inclusive education by 2012. 500 Primary schools will be converted into full service schools.
- 2.10. In addition to the inclusive education policy, the National Building Regulation of 1986 stipulates that all new buildings must be accessible to all. Designated full service schools that were built before this date should therefore be adapted to comply with this regulation. All new

schools should take accessibility into account. More than just the infrastructure, some furniture may need adjustment to allow for easy movement and seating.

- 2.10.1. Implication for the teaching and learning environment: Table 1 in Chapter 1 points to the level of effort required to give full effect to the admissions policy, inclusive education policy and to the national building regulation. At the same time, the feasibility of the set policy targets may need to be reconsidered as their cost implications on the physical environment and their demand on implementation capacity are evident.
- 2.11. **E-Education, reading, mathematics and science education:** The Joint Initiative for Priority Skills Acquisition (JIPSA) and the current sector strategy prioritize mathematics, science, and reading. To facilitate reading, the sector strategy will among others, ensure that by 2012, all grade 10, 11, and 12 learners receive a minimum of 7 textbooks each. The provision of libraries and library stocks will be substantially enhanced across all schools.
- 2.12. As part of the JIPSA projects, the first implementation phase of the mathematics science and technology improvement strategy (referred to as Dinaledi Schools) was launched in 2001. The project is expected to improve student learning outcomes in mathematics, science and technology significantly. It mostly caters for disadvantaged learners with demonstrable potential in these subject areas. Relative to the rest of our schools, these schools are adequately resourced to become centers of excellence in these subjects. Their impact is beginning to show.
- 2.13. The 2004 White Paper on e-Education sets out to transform teaching and learning through ICTs. The target is to have every learner in the GET and FET band ICT capable by 2013. In addition, the 500 Dinaledi schools and 50 FET colleges will be connected and capable to enhance administration and management functions by 2009. By 2011, the same set of Dinaledi schools and FET colleges will have ICT infrastructure for teaching and learning purposes and 35 percent of the schools will be e-ready. By 2010, all high schools will be connected, have access to the internet and use ICTs for management and administration. By 2010, 50 percent of all schools will be connected, have access to the internet and use ICT for management and administration. In addition, high quality electronic curriculum content resources will be increased and the portal will be extensively used as a curriculum content resource for communication. Within this strategic plan period, the capacities of ICTs for the national and provincial structures will also be substantially enhanced.
 - 2.13.1. Implication for the teaching and learning environment: A significant improvement of the reading scores of our learners will require substantial improvements not only to the provision of textbooks but also to the provision of supplementary materials through well stocked libraries and/or innovative mechanisms of bringing library stocks to learners. Yet as shown in Table 1, a substantial numbers of schools do not have libraries. While it can be noted that it may not be feasible for all schools to have libraries, the provision of adequate library stocks in hard and/or electronic form to all learners is an equity imperative.
 - 2.13.2. Improvements to student learning outcomes in science have implications for the provision of science laboratories or at a bare minimum, equipment that allows for the simulation of science experiments for learners' virtual experience. Yet, Table 1 shows that 60 percent of schools do not have science laboratories and/or suitable substitutes. On top of all this, the expansion of Dinaledi schools demands heavy investment in laboratories, equipment, instructional materials and consumable.

- 2.13.3. Effective implementation of the e-education policy implies substantial investments in suitable infrastructure for ICTs and in appropriate equipment. There are also implications for the provision of such basic services as reliable and affordable power supplies and telecommunication systems. As presented in Table 1, nearly 70 percent of schools do not have computers for teaching and learning purposes currently. A significant number of schools rely on cell phones for their daily communication. Connectivity is not readily possible for a fair number of schools. Where available, sustained affordability of connectivity is in even greater doubt. Power supply is still unreliable, not only for schools but even for the whole country. These constraints point to improvements required in the environment if this e-education policy is to be implemented effectively, its targets to be attained and its impact to be realized in an equitable manner.
- 2.14. Curricula and pedagogical reforms such as the OBE and NCS: The introduction of OBE and learner-centered pedagogy imply the need for more generous classroom spaces and furniture that allow for flexible seating and grouping arrangements. They also imply better equipped classrooms and special teaching areas, more flexible multi-purpose learning areas, learning resource centers, library stocks, ICTs and more enriched teaching and learning environments.
 - 2.14.1. Implication for the teaching and learning environment: Effective implementation of these reforms suggests dramatic changes to the physical teaching and learning environment. As shown in Table 1, a little more than a quarter of classrooms are overcrowded, there is shortage of laboratories and other relevant equipment, library stocks remain scarce, even for schools with library buildings. Without adaptations to norms and standards for provision of these elements, there is a clear risk of failure to attain the intended benefits of such curricula and pedagogical reforms.
- 2.15. Sport in education: The priority accorded to sport education has implications for school sites, sport facilities and equipment. The same will apply for the emerging emphasis on art and music. A large proportion of schools do not have adequate grounds for learners to play safely, let alone sports facilities and equipment. This priority program will not realize its intended impact if adjustments are not made to norms for the size and appropriateness of school sites. In particular, it is difficult to see how farm schools and small rural schools could prioritize sport if no serious adjustments and/or innovations are made.
- 2.16. National school nutrition program (NSNP): In 2004, the DoE took over responsibility for this program from the Department of Health. Adopting a pro-poor sequence, the DoE seeks to ensure that 60 percent of the poorest grades R to 7 learners receive a nutritious meal per day. The current strategic plan targets to have a little over 8 million learners receiving quality meals at schools that serve the poorest communities by 2012. Within the same period, the DoE plans to have 13, 500 food production projects in place in nodal and other schools where there is severe need. The ultimate indicator of progress in this area is to have 345 000 learners making improvement in good nutrition and healthy lifestyle by 2012.
- 2.17. These programs require the availability of reliable drinking and cooking water supplies, cooking facilities, equipment, utensils and food supplies. During inclement weather, some rural and farm schools have to use classrooms as kitchens. Perennially, these schools use classrooms as storage space for food supplies and cooking utensils. This inappropriate use of physical spaces has a double burden of insufficiently serving the purpose for which they are used while displacing learners from the much needed teaching and learning space. The NSNP is aligned with the Integrated Food Security Program that promotes the establishment of food gardens in schools and communities. This implies adequate and suitable grounds to provide space for these gardens. Yet there are no clear norms on the size and suitability of school sites.

- 2.18. Guidance and counseling and pastoral care: In the face of HIV/AIDS and the accompanying physical and psychosocial stress on learners and educators; school health and counseling programs are critical necessities. These factors necessitate holistic counseling and pastoral care. As part of the improvement of counseling and pastoral care, 36, 000 learners will be reached through the harmonized peer education care and support program targeting Grades 6 to 12 across all provinces.
- 2.19. Complex career choices and rapidly changing labor market needs impel sophisticated career counseling services for learners. These services require physical spaces and facilities that provide for privacy of service. Currently, most schools do not have such spaces. This may constrain student uptake of services, especially where their privacy is at stake.
- 2.20. Student health and safety: As noted, nearly 15 percent of the learners are exposed to environments that pose both a safety and health hazards. Ablution facilities are particularly inadequate. Nearly 80 percent of schools have more than 50 learners per toilet. For the girl child in particular, such constraints may adversely impact on attendance and consequently in schooling and learning outcomes. Inadequate provision may translate into denying these children substantive access to ETSD, and thus violating their constitutional rights.
- 2.21. During the current strategic plan period, DoE will strengthen the coordination and monitoring of the implementation of the framework on health and wellness in education. The target is to have the framework implemented in 2 000 of the nodal and other schools by 2012. 30, 000 Grade R to 4 learners in nodal and farm areas will be screened for minor ailments.
- 2.22. In terms of safety, the NEIMS showed that by 2006, only 5.5 percent of assessed schools had a functional gate and fence. Even fewer had burglar bars and/or alarm system. This is in times of serious concerns for student safety in some areas, and whilst 32 percent of schools show some evidence of vandalism, and whilst. 585 schools were identified as presenting high levels of crime and violence. To make these schools and indeed all others a safe learning environment, DoE will have to strengthen the implementation of school safety programs and integrate school safety as a key component of school management.
- 2.23. Strengthening school-community relationships: The current sector strategy prioritizes the need to strengthen school-community relationships. This is a dual relationship in the sense that communities are critical contributors to the development of their children's schools, education processes and outcomes. At the same time, communities are also benefit from their schools. There is still a challenge of providing adequate facilities in schools that communities could use. It is equally challenging to design schools in a manner that are culturally inviting and appropriate for community usage. The new norms and standards will address this area.
- 2.24. Schools of the future: Although not yet in policy documents, some provinces are beginning to explore the concept of schools of the future. These may remain under the rubric of "special programs". If adopted, they will demand a serious re-thinking of the provision of the physical teaching and learning environment. As South Africa's intends to advance the teaching of science and technology, such global developments need further investigation for possible inclusion in future policies.
- 2.25. Overall: Other than the specific demands of each policy, an added challenge is that, at present, the DoE do not have a robust framework and tools for prioritization of these policies and their targets. It has been noted that debate on policy and on trade-offs among the above policy targets needs strengthening. As such, the set of sector policies does not provide an obvious guidance for the prioritization of elements of the teaching and learning environment. Within a context of scarce resources, it would be difficult to avoid trade-offs. A specific policy and

strategic guidance on the physical teaching and learning environment is therefore required to not only respond to the demands of the above sector policies, programs and legal instruments, but to motivate them into some form of prioritization. As part of this proposed policy, a simulation model that can help us cost our policy choices, assess the feasibility of our policy targets and provide us different workable scenarios for reaching priority targets has been developed.

Conclusion

This proposed policy, the accompanying norms and standards and the long-term investment plan provides a map on the basis of which the issues addressed in this chapter can be tackled.

CHAPTER 3: STRATEGIC POLICY DIRECTION AND OBJECTIVES

Introduction

- 3.1. The strategic direction of this policy is derived from policy tenets that permeate national and sector policies because specific policies, programs and targets reviewed in Chapter 3 are bound to change over time,. These canons are what all national, sector, sub-sector and thematic policies endeavor to contribute towards their actualization. They constitute the strategic direction and core objectives of each policy. These enduring policy tenets include the improvement of:
 - 3.1.1. broad-based access;
 - 3.1.2. equity and redress;
 - 3.1.3. quality and effectiveness;
 - 3.1.4. functional relevance / responsiveness;
 - 3.1.5. efficiency; and
 - 3.1.6. national values (democracy, excellence, accountability, social cohesion, diversity, innovation and creativity, critical thinking and judgment, cooperation, etc.)

Policy objectives

3.2. The following indicates how these canons provide a conceptual framework and strategic objectives for this policy:

Facilitating broad-based access, equity and redress

- 3.3. The first strategic objective of this policy is to facilitate broad-based and equitable access to education, training and skills development opportunities. The ease or lack thereof of physical access to teaching and learning spaces is still the dominant determinant of equity of access. Proximity to or distance from schools is a strong determinant of whether or not children will enroll, enroll at the right age, consistently attend, stay engaged, or eventually survive or drop out of school. The design of school infrastructure determines whether learners with special needs will enroll and effectively participate in school. The availability or lack of certain physical facilities-e.g., ablution-is a strong determinant of gender patterns of participation and completion rates in education, training and skills development. Children who enroll in incomplete schools are more likely to drop out of school between cycles than those that are enrolled in schools that provide a full cycle. For these reasons the first proposed policy area relates to the definition of norms and standards for equitable access. Among others the proposed norms will include a specification of adequate distance from school. The policy under this area sharpens the current zoning or catchment area system by defining a clear norm for reasonable distance from school. Learners, especially in rural and farms areas reported walking diversely varied distances with the worst reported as 34 kilometers per day to and from school.
- 3.4. Where ease of physical access to schools is not financially feasible, proposed alternatives include the provision of transport, provision of hostels, and/or the provisioning of special schools.
- 3.5. The provisioning of physical teaching and learning space in the form of classrooms, teaching rooms and schools remains the most dominant and traditional tool for broadening access to education, training and skills development. The pace with which systems can construct teaching and learning spaces is essentially the pace with which they can broaden access to ETSD services. These spaces guarantee nominal access without which substantive access is impossible. For this reason, the second

Policy identified in the next chapter which requires a policy direction at a national level is the systematization of the process for identifying priorities for provision that guarantees nominal access as the basic entry point to substantive access. Policy statements under this area address the need to have a clear, systematic and systemic approach to prioritizing the provision of key elements of the physical teaching and learning environment. A clear policy on this area will reduce destructive and inequitable variations in provision.

3.6. The third and less used alternative mode of bringing education, training and skills development services close to learners is the use of ICTs. Except in higher education, South Africa is yet to exploit the full potential of this alternative. Binding constraints include availability and affordability of sources of power. Affordability not only of the hardware but also of connectivity. With other forms of ICTs (e.g. radio and television) there are still issues of affordability, maintenance and upkeep with recurrent costs. As outlined above, our current strategic plan sets bold targets for mainstreaming ICTs in the curricula, pedagogy and management of the education. training and skills development system.

Improving quality and effectiveness in an equitable manner inclusive of past inequities

3.7. The second objective is to improve the quality and effectiveness of teaching and learning and thus improve learning outcomes. Physical or nominal access is an essential but inadequate condition for quality education, training and skills development. Full provision of the right to education requires substantive access. Contrary to common wisdom from the first generation of production function analysis, recent analyses show that the physical environment affects teaching, learner engagement, learning and potential learning outcomes (see Box 1). In contrast to earlier findings that school factors are weak determinants of student learning outcomes, follow up and more

Box 1: The impact of physical environments on teaching and learning effectiveness Poor learning environments contribute to:

- irregular attendance and drop out
- teacher absenteeism, attrition and turnover
- a poor state of students and a poor ability of teachers to engage them in learning

The age /physical appearance of school buildings influences:

- · student achievement
- the attitudes of teachers' toward the schools

Extreme thermal conditions of the environment:

- affect academic achievement
- affect student ability to grasp instruction
- temperatures above 27 degrees Celsius tend to produce harmful physiological effects on students
- increase annoyance and reduce attention span and mental efficiency of all, especially in situations where learners are performing tasks calling for quick recognition and response
- increase errors in performing tasks
- increase teacher fatigue and deterioration of work patterns

Good lighting contributes significantly to:

- the aesthetics and psychological character of the learning space
- students' ability to perceive visual stimuli and to learn
- student ability to concentrate on instruction

Color influences:

- student attitudes, behaviors and learning
- students' attention span as well as the teacher's sense of time
- · student and teacher mood
- · absenteeism and feelings about school

Good acoustics improves:

 Student ease of hearing and concentration especially when considering that at any one time, 15 percent of students in an average classroom suffer a hearing problem that is either genetically based, noise-induced, or caused by infection

Outdoor activities contribute to:

- formal and informal learning systems
- physical education
- social development
- · team work
- · school community relationships
- •

- sophisticated analyses suggest that earlier findings could have been a function of the degree of variance in predictor variables. Developed country systems that have managed to reduce variation in school factors, render these factors less powerful predictors of student learning. For developing countries however, where there is still a wide variation in provision, school factors tend to be more powerful predictors.
- 3.8. As noted, progress has been made in improving provision, but the technical adequacy and the substantive responsiveness of this provision remains doubtful. Potential substantive inadequacy partly arises from the exclusion of educators from processes that determine specifications of teaching and learning environments. Because inequalities and unwarranted variations in the physical environment may risk equitable provision of quality education, the following chapter highlights both process and participation in the determining norms and standards for the teaching and learning environment as a matter that requires standardization /formalization through policy. Such processes should take the elements in Box 1 into consideration.

Enhancing relevance / responsiveness

3.9. The third objective is to enhance the responsiveness of the physical teaching and learning environment to core demands of the education sector: As the dictum goes, "form follows function". It is recognized that physical environments should respond to the core business that is to be transacted in those environments. In Chapter 3, it was argued that these environments should facilitate effective implementation of sector policies, programs and legal instruments. It is recognized that in this specific case, the main business to be transacted in the environment in question is teaching and learning. It has also been noted that sources consulted suggest that this environment does not adequately take into account teaching and learning processes. In the past, educators have not been adequately consulted in the design of teaching spaces. The views of key users—teachers, learners, administrators, communities—were not rigorously taken into account. Designs did not adequately reflect the complex needs of learners including private spaces such as for counseling, health consultations, and sick bays. Despite South Africa's complex curricula, the environment has hitherto lacked a systematic way of responding to curricula or their pedagogical imperatives. At best, the relevance or responsiveness of the system to core functions of schools and to primary users has been weak.

Increasing efficient utilization and management of facilities

3.10. The fourth objective is to increase efficiency in the utilization and management of elements of the physical teaching and learning environment. As noted in the foregoing introduction, the government is allocating a substantial amount of resources to the improvement of the teaching and learning environment. Physical facilities—buildings, equipment and furniture, claim the highest proportion of our sector development budget. Efficient and/or inefficient use of these facilities translates into huge resource wastage. Poor management and maintenance of these facilities also accrue very high costs and translate into unaffordable resource wastage. The NEIMS suggests that poor management and maintenance of infrastructure may have trapped the country into perpetual and unaffordable refurbishing and even replacements of school infrastructure. It has been noted that the current lack of life-cycle management of assets, equipment, and instructional materials leads to further loss of much needed resources. As outlined above, the negative impact of poor physical teaching and learning environment on education quality affects internal efficiency of the education, training and skills development system. Poor quality or ineffective teaching and learning environment generate high failure, repetition, and drop-out rates and the resultant inefficiencies in the use of education resources.

Promoting espoused values

3.11. The fifth objective is to promote key values that are to be promoted through the sector: The design and usage of key elements of the current physical teaching and learning environment does not adequately give effect to South Africa's cherished values, and especially values espoused by the sector. The diversity of South Africans could be better reflected in architectural designs. The very creation of the designs could better reflect democratic values through inclusive consultation. The stimulation of well designed and used environment could lead to innovation. School community relationship and open communication between the two could yet be other values expressed through designs. The way schools are designed, and policies on the usage of school facilities could cement or hamper effective school/community relationships. As such, promoting espoused values is another key objective of this policy.

CHAPTER 4: POLICY AREAS AND POLICY STATEMENTS

Introduction

- 4.1. Against the historical context guided by national and sector demands and the above-outlined policy objectives, 6 areas requiring a clear strategic policy direction and 2 areas that require clear and consistent operational policies—hereafter referred to as policy areas, were identified. Strategic policy areas are those that require national and high level decisions to regularize them and to align them with national and sector policy priorities. They are fundamental for the attainment of policy objectives outlined in Chapter 3. From a cost-benefit point of view, strategic areas are those whose adoption will bring about significant benefits in terms of the actualization of national and sector policies. Strategic policy areas also have a high efficiency factor in the sense that they contribute to the attainment of several national and sector policies.
- 4.2. In contrast, operational areas are of a lower level but are still significant enough to warrant regularization at a national level. They are enablers of the first 6 strategic areas. They have been highlighted because, if not addressed, will frustrate the effective realization of strategic policy areas.
- 4.3. The 8 policy areas requiring strategic and operational policies are detailed in this chapter and in their sequential order as follows:
- 4.3.1. authority for setting norms and standards for an enabling environment 4.3.2. authority and the process of setting priority needs for the environment *4.3.3.* the extent of planning for the provision of an enabling environment 4.3.4. whether or not to standardize architectural designs 4.3.5. the nature and system for asset management and maintenance 4.3.6. sources of funding for the environment 4.3.7. assuring effective capacity to deliver elements of the environment 4.3.8. sector procurement procedures and procurement management
- 4.4. For each of the above areas, the document presents the actual statement of the policy which will hereafter guide the provision of an enabling teaching and learning environment. The document also identifies specific policy actions required to actualize each of the 8 policy statements. These actions are what will make it possible to implement each and every policy as stated. Expected benefits of each stated policy are also clearly delineated in the policy. Key risks associated with each policy and strategies to mitigate risks that may abort and/or frustrate expected policy benefits are also identified.
- 4.5. While each policy area has specific benefits, a prime benefit of the national policy is guidance of future provision of an enabling physical teaching and learning environment, ensuring equity of provision and effective facilitation of national and sector policies, strategies and programs. This national policy is also not intended to stifle constructive or enriching variations in provision, but rather to regularize and systematize variations and inconsistencies that risk the attainment of policy objectives presented in Chapter 4.
- 4.6. The realization of expected policy benefits will also depend on the ability to effectively implement the national policy detailed below. It is for this reason that concerns for delivery capacity has been elevated to a level of a national operational policy (policy areas # 7). At the same time, this policy will guide long-term strategic plans and a series of implementable medium term programs. Medium term programs will provide a base for strengthening implementation support tools such as: implementation plans; procurement plans; financial and

- disbursement plans, national and international benchmarking; monitoring and evaluation; and impact evaluation.
- 4.7. The realization of expected policy benefits will also demand a more efficient use of resources. To that end, close attention has been paid to cost control measures, especially within the second operational policy (policy area # 8). Beyond efficiency measures, effective implementation of this policy may require additional resources. To this end, policy area # 6 highlights the need to diversify funding sources and to ease the burden on government. This policy therefore guides the development of a 20-year investment plan for an enabling physical teaching and learning environment presented as a different output.
- 4.8. This national policy is therefore setting in motion not only a future strategic policy direction, but also practical steps to ensure effective policy implementation and the monitoring of its expected development impact.

Policy areas and policy statements

Policy Area # 1: Nationally established norms and standards for an enabling environment

Background

- 4.9. In Chapter 2 it was noted that the degree to which schools can equitably deliver expected educational outcomes, partly depends on the adequacy of inputs they are provided and processes they use to mobilize those inputs into results. As presented in Chapter 3, this policy is guided by expert knowledge on the link between certain education resource inputs and processes on the one hand, and learning outcomes on the other. Specifically, current knowledge guides the link between core elements of the physical teaching and learning environment, and effective teaching, effective learning and learning outcomes. This knowledge is what guides the selection of a minimum and optimum basket of inputs and processes that each school must have if it is to be held accountable for a certain level of outcomes. The strategic plan refers to a Basic Minimum Package (BMP) below which no school should operate. Within this policy statement, the idea of a BMP is further developed to speak of a minimum and optimum mix of education resource inputs.
- 4.10. A well defined basket of inputs will constitute minimum and optimum norms and standards for an enabling physical teaching and learning environment. Along a continuum from minimum to optimum, the environments of our schools will be graded as meeting the criteria for safety, functionality, effectiveness and enrichment. A national consultative process on the norms and standards will generate agreed operational definitions of these gradations of the environments. However, by way of example,
 - 4.10.1. safety entails the bare minimum inputs below which a school will be deemed inoperable and immediately closed. For example, if a school does not have safe water, sanitation facilities that meet national health standards, if students are exposed to intolerable elements such as intolerably bad weather, toxic substances in their environment; extremely unsafe building structures that could crumble onto students, classrooms overcrowded beyond a pre-defined threshold of classroom size, etc.
 - 4.10.2. *functionality* entails adequacy of inputs that make the school functional but not necessarily effective. Among others, the school will have to meet minimum safety norms and standards and have the basic facilities that enable it to carry out its core

- functions of teaching and learning. Examples include a school that has adequate classrooms, ablution facilities, textbooks, basic supplies of fundamental teaching aids like rulers, etc;
- 4.10.3. effectiveness is the level where we want all our schools environments to be. This level entails both safety and functionality. Additionally it will meet core facilities like classrooms that enable the recommended—not just tolerable—class size, specialized teaching spaces, staff preparation room, administration block, multipurpose learning resource center, multipurpose school hall, laboratories and/or alternatives, adequate equipment, library or library stocks that are regularly renewed, accessibility for all, etc; and
- 4.10.4. *enrichment* levels pertain to special programs which may be launched from time to time as needs arise. A current example will be the Dinaledi project. From time to time a decision will be made on the thrust of these enriched environments, their duration, participation levels and the proportion of schools at any one time that should have such environments. Enriched environments are not intended to apply to all schools.
- 4.11. Optimum norms and standards are those that meet the effectiveness criteria.

Key challenges addressed by this policy

- 4.12. The fact that most countries do not explicitly define minimum input and process norms required to realize results within their specific contexts is seen as the first challenge. It is more common to define financing norms in the form of funding formulae and/or per-capita financing. However, the emerging adoption of performance-based systems and accountability systems make it more and more important to define the "tools" required to deliver on expected performance and to define resources for which system are held accountable.
- 4.13. Within a context like South Africa where unthinkable levels of deprivation co-exist with rare levels of resource endowment, where the need for equity and redress is as compelling as the need for global competitiveness; setting input and process norms and standards is a major challenge. The key challenge is to ensure equity without reducing every school to the lowest common denominator. It is to set standards while not losing sight of the diversity and uniqueness required to promoting innovation. Equally, it is to ensure equity while not losing sight of the need to accelerate development.
- 4.14. The second challenge is to therefore develop "balanced" norms and standards. This policy area is the step in the direction of that crucial balance. The concept of balance is about proportional responsiveness of norms and standards to their context of application.
- 4.15. The third key challenge is affording the set of endorsed norms and standards. Like any policy instrument, real norms and standards are what get implemented, not what is on paper. Often countries set norms and standards but do not adequately fund them. Often, shortage of funds leads to a gap between "official and funded norms and standards" with the latter being far less than the former. For instance, resource norms and standards implied in special projects like Dinaledi may make them unaffordable and/or unsustainable, despite whether of not more schools meet the 'admission' criteria.
- 4.16. The fourth challenge is capacity to implement norms. Even where funding may not be a binding constraint, implementation capacity may create a gap between "funded" and "practiced" norms; creating a third level of diminution. For instance implied or tacit pedagogical process norms made it very difficult for South African schools to effectively implement OBE as originally designed.

- 4.17. The fifth challenge is inconsistency of norms generated at different levels of the system. In some provinces for instance, a wide gap between the official and the practiced admission policies has led to a gap between a tacit norm for catchment area and the practiced norm. In another province, the norm for optimum school size clashed with the national norm for school managers' salaries increase. This clash resulted in the violation of the former.
- 4.18. The sixth challenge is the need to balance equity with development.
- 4.19. The seventh challenge relates to norms that are not sensitive to the wide variation in the education contexts of South Africa's schools. For instance, the size of some schools may make certain inputs norms inefficient and/or impracticable. However, learners in such schools have the same rights as their counterparts in other settings. The challenge is to develop norms that allow for contextual adaptability that ensures learners comparable ETSD experiences. It is about developing norms that observe equitable quality while not violating efficiency and development responsiveness.
- 4.20. The current impression is that this country faces all the above outlined challenges. As elaborated below, the first challenge applies to the national department of education and less so to provinces. The rest—inadequate balance, resources, capacity, and inconsistencies apply to both levels.

Prior and ongoing efforts

4.21. In absence of national norms and standards, provinces have developed their own norms and standards, generating a set of 9. What is in question is the adequacy of those norms and standards and, the extent to which they are actually applied. The current level of variation warrants a policy direction.

Persisting challenges

- 4.22. Because of the lack of national norms, provinces are without guidance for the minimum limits. They are also without guidance on the optimum mix of inputs that should best facilitate desired results. Naturally, the set of 9 norms reflects the diversity of provinces. In general, the coverage of norms is limited. Invariably, they entail a specification of the size of facilities by band, school type and school size. The most elaborate specification of norms is perhaps from the Orange Free State and Gauteng provinces. The latter explicitly uses curricula as determinants of the type of learning spaces to be provided.
- 4.23. The current range of norms poses a serious challenge in the need to balance between equity and development. Hardly any province includes processes—specification of norms, consultation, delivery cycle, supervision of construction—in its specification of norms and standards. It is also uncommon for provincial norms to fully cover elements of the physical environment—infrastructure, furniture, equipment, etc. There is also a wide range of the detailing of norms and standards. In some provinces, covered aspects are very well developed in others they are vaguely stated. Across all provinces, the norms and standards are not products of a robust analysis of education needs—refer to Policy Area # 2—to be met through those norms. Except for the Gauteng province, even the space norms are divorced from the activities that actually take place inside those spaces. Prepared norms tend to be disconnected from core sector policies. This makes them a very weak instrument for operationalizing policies.

Policy statement

4.24. Effective from 2008, norms and standards for the physical teaching and learning environment will be set at the national level by the Minister of Education. National norms and standards will be set and expressed in terms of minimum and optimum provision. Along this continuum, norms and standards for school safety, functionality, effectiveness and enrichment will be explicitly defined at a national level by the Ministry of Education. The Ministry will also set clear target dates by which a set

proportion of schools will meet each level of enablement in its environment. The Ministry will also set a clear data by which all South Africa schools will meet norms and standards for effectiveness.

- 4.25. National norms and standards will be developed during 2008, and fully adopted by the end of 2009.
- 4.26. Provinces may adapt national norms and standards to their contexts without prejudice to set minimums Effective from January 2010, all provinces will have aligned their provision programs to national norms and standards and to set targets. By the end of the current strategic plan period—2008 to 2012—all schools will meet inputs and process norms required for safety, functionality and effectiveness.
- 4.27. Às need arises, national and/or sector strategic development priorities will be translated into enrichment norms and standards as defined by the Ministry of Education. These norms will be defined in response to current national and sector development imperatives. Such dictates may be the need to ramp up certain outputs such as in the Dinaledi project. It may be to fast track reaching international benchmarks required to be competitive. It may be 'catching up with international developments' such as the mooted 'schools of the future'. It may be to create regenerative capacity that can latter be applied to ramp up equitable quality such as in the creation of pockets of excellence. It may be to ride a global market tide as in the case where a certain skills mix is required within a short period of time. It may be the need to level the playing field where the floor is too low relative to the ceiling and needs to be raised within short time spans, etc.
- 4.28. The national Department of Education will execute the meeting of enrichment norms and standards.
- 4.29. Access to and benefits from enrichment norms will be equitable. In real terms, going beyond the norm is creating justified inequality, the justification has to be explicit, transparent, and owned by a reasonable threshold of stakeholders. Such strategic inequalities should therefore be "mandated inequalities". The process and decision on who has the mandate or how the mandate is created will be transparent. Such a mandate will lie with the office of the Minister of Education—because it is responsible for overall sector development.
- 4.30. Because "mandated inequalities" violate the national and sector "norm of equal opportunity" the distribution of opportunities to schools and/or programs that go beyond effectiveness criteria will itself be explicitly and transparently equitable. Criteria will therefore be equity based. Proposed principal criteria are aptitude, exceptional achievement, and redress.

Key policy actions

- 4.31. Adoption of a common and broadened approach / methodology for defining minimum and optimum norms and standards: The current state of weakness in the articulation of norms and standards demands the articulation of a very clear methodology for articulating comprehensive norms and standards. In its initial form, such a methodology has to be based on international best practice and current provincial efforts at developing norms and standards.
- 4.32. Adaptation of the approach to South Africa's context: The adopted methodology will be adapted to fit the context of South Africa and to later fit the context of diverse provinces.
- 4.33. Adoption of a process for defining norms and standards: Because of the technical nature of the work, the proposed process for defining national and even provincial norms and standards will entail the setting up of technical working groups supported by international expertise. At a bare minimum, working groups will have representation of physical planners, experts that can effectively